Protein Structure
Figure 34: Schematic of x-ray crystallography experiment.

Figure 16AB: Gel electrophoresis.

Figure 01: Structure of an α-amino acid
Figure 06: Amino acids with nonpolar side chains
Figure 07: Peptide bond formation in the laboratory
(a) Primary structure: polypeptide chain

Figure 23a: Protein structure.

Figure 29: Macroscopic dipole in the α-helix

Figure 30B: Antiparallel β pleated sheet

Figure 32ABCD: A) Hairpin turn B) Helix-loop-helix C) β-α-β unit D) Greek key
Figure 23bcd: Protein structure.

(b) Secondary structure: 
β pleated sheet, α helix, and random coil

(c) Tertiary structure: 
β pleated sheet, α helix, and random coil

(d) Quaternary structure: 
two or more folded polypeptides

Figure 35B: Crystal structure displayed in stick form.

Figure 35C: Crystal structure shown in ribbon form.

Figure 35A: Crystal structure of ribonuclease A displayed in space filled form.

Figure 06: Human deoxyhemoglobin with 2,3-bisphosphoglycerate bound to the twoß-globin chains.

Figure 12: Reaction coordinate diagram for an uncatalyzed reaction (red) and an enzyme catalyzed reaction (blue).
Figure 14A: Lock-and-key model of enzyme-substrate interaction

Figure 14B: Induced fit model

Figure 16: Hexokinase, an example of induced fit.

Photos courtesy of Thomas A. Steitz, Yale University.